



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

not longer resist raising the inquiry what advantage certain writers of elementary mathematical texts—Professor Tanner among others—hope to gain in point of logical, or any other sort of completeness, by the following definition of multiplication: “*The product of two numbers is the result obtained by performing upon the first of these numbers (the multiplicand) the same operation that must be performed upon the unit to obtain the second (the multiplier)*”?

Let us see: $5 \times 4 =$ what, on this definition? In this definition nothing is said about how the *unit* is to be “performed upon” to give the 4. I have a perfect right therefore to perform upon it thus: $1^3 + 1^2 + 1^1 + 1 = 4$, in accordance with the law $x^3 + x^2 + x + 1$. Now I must “perform on” the 5 in the same way to get the product. This gives me $5^3 + 5^2 + 5^1 + 5 = 160$. Therefore, in the form stated 5×4 may just as well be 160 as any other number.

Of course, this definition is thoroughly “innocuous” because no high-school pupil ever understands it, and no high-school teacher ever uses it.

The writer would not have the reader believe for a moment that the character of Professor Tanner’s book is in any way epitomized by this pointless attempt to introduce fuller adequacy into the definition of multiplication. Pretty much every writer who is impressed only with the need of logical perfection in the high school has used it, and some go so far as to call high-school teachers to account for not using it. The writer challenges it in Mr. Tanner’s book, because the book possesses so many distinct points of merit that it can easily stand the challenge.

Mr. Tanner’s treatment of factoring is excellent—much superior to the customary treatment. Type-forms typify something to the pupil as he treats them. The book contains many lists of problems, an unusually large number of which have a meaning and are worth solving by high-school boys and girls. Many of the problems are modern in a true sense.

The author evidently does not believe in the early use of graphs in algebra. The book contains nothing before p. 314 on the graph, and this, the writer believes, is unfortunate. Here there are three short sections on “Graphic Representation of Equations.” A chapter on “Mathematical Induction” is a valuable feature. Aside from the rather formal development of topics, and a little too early and too continuous insistence on work by rule, the writer regards this as a good one. To say that it is one of the most teachable books of the Cornell Series is no mean praise.

G. W. MYERS.

UNIVERSITY OF CHICAGO.

BOOKS RECEIVED

(The notice here given does not preclude the publishing of a comprehensive review.)

EDUCATION

Principles of Teaching, Based on Psychology. By EDWARD L. THORNDYKE.
New York: A. G. Seiler, 1906. Pp. xii + 293.

HISTORY AND CIVICS

The Making of the American Nation. A History for Elementary Schools. By JACQUES WARDLAW REDWAY. New York: Silver, Burdett & Co., 1905.
Pp. xii + 412 + 56.